STATE AUTOMATION SYSTEMS STUDY
SITE VISIT: DECEMBER 13 - 15, 1993
DISTRICT OF COLUMBIA REPORT
NOVEMBER 22, 1994
FINAL
Prepared for:
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FNS Contract No. 53-3109-2-007
THE ORKAND CORPORATION

# **TABLE OF CONTENTS**

			Page
	STA	TE PROFILE	. 1
1.0	STA	TE OPERATING ENVIRONMENT	. 2
2.0	FOO	DD STAMP PROGRAM OPERATIONS	. 2
	2.1	Food Stamp Program Participation	. 3
	2.2	FSP Benefits Issued Versus FSP Administrative Costs	. 3
	2.3	FSP Administrative Costs	. 4
	2.4	System Impacts on Program Performance	. 4
		2.4.1 Staffing	. 4
		2.4.2 Responsiveness to Regulatory Change	. 5
		2.4.3 Combined Official Payment Error Rate	. 5
		2.4.4 Claims Collection	. 6
		2.4.5 Certification/Reviews	. 6
3.0	OVE	CRVIEW OF THE SYSTEM	. 6
	3.1	System Functionality	6
	3.2	Level of Integration/Complexity	11
	3.3	Workstation/Caseworker Ratio	11
	3.4	Current Automation Issues	11
4.0	SYS	TEM DEVELOPMENT AND IMPLEMENTATION	12
	4.1	Overview of the Previous System	12
	4.2	Justification for the New System	12
		THE ORKAND CORPORATION	

# TABLE OF CONTENTS

			<u>Page</u>
	4.3	Development and Implementation Activities	13
	4.4	Conversion Approach	15
	4.5	Project Management	15
	4.6	FSP Participation	16
	4.7	MIS Participation	16
	4.8	Problems Encountered During Development and Implementation	16
5.0	TRA	NSFERABILITY	17
6.0	SYS	TEM OPERATIONS	17
	6.1	System Profile	17
	6.2	Description of Operating Environment	18
		6.2.1 Operating Environment	18
		6.2.2 State Operations and Maintenance	19
		6.2.3 Telecommunications	19
		6.2.4 System Performance	19
		6.2.5 System Response	19
		6.2.6 System Downtime	20
		6.2.7 Current Activities and Future Plans	20
7.0	COS	T AND COST ALLOCATION	20
	7.1	ACEDS Development Costs and Federal Funding	20
		7.1.1 ACEDS Components	22

\_\_\_\_ THE ORKAND CORPORATION \_

# TABLE OF CONTENTS

				Page
	7.1.2	Major De	velopment Cost Components	23
		7.1.2.1	Hardware	23
		7.1.2.2	Contractor Costs	24
		7.1.2.3	Summary of ACEDS Development Cost Components .	24
7.2	ADP (	Operationa	l Costs	25
	7.2.1	Cost Per	Case	26
	7.2.2		erational Cost Control and Practices	26
7.3	Washi	ngton D.C	Cost Allocation Methodologies	27
	7.3.1		Development Cost n Methodology	27
	7.3.2	-	erational Cost Allocation ogy and Mechanics	28
		7.3.2.1	Allocating IMMS Operational Cost	28
		7.3.2.2	Allocating OIS Operational Cost	28
		7.3.2.3	Preparing the SF-269	29
			APPENDICES	
Distric	t of Co	olumbia Ex	khibits	<b>A-1</b>
Analys	sis of C	Operator U	ser Satisfaction Surveys	B-1
Analys	sis of N	Managerial	User Satisfaction Surveys	C-1

Α

В

C

# LIST OF TABLES

<u>Table</u>	No. Page
2.1	Average Monthly Public Assistance Participation
2.2	FSP Benefits Issued
2.3	FSP Federal Administrative Costs
2.4	Official Combined Error Rate
2.5	Total Claims Established/Collected 6
4.1	ACEDS Projected Cost Savings
7.1	Total ACEDS Development Costs and Federal Funding 21
7.2	ACEDS Development Cost History
7.3	IBM Contract Cost Components
7.4	Systemhouse, Inc. Contract and Amendments
7.5	ACEDS Development Expenditures by Cost Component
7.6	ADP Operational Cost
	APPENDIX A - District of Columbia Exhibits
<b>Exhib</b>	it No.
A-2.1	Response to Regulatory Changes
	District of Columbia Hardware Inventory

#### DISTRICT OF COLUMBIA REPORT

Site Visit December 13 - 15, 1993

### STATE PROFILE

System Name:

Automated Client Eligibility Determination System

(ACEDS)

Start Date:

1990

Completion Date:

1993

Contractor:

Systemhouse, Inc.

Transfer From:

South Carolina

Cost:

Per January 1989 APD

Per April 1994 APDU

Actual: Projected:

\$23,451,000 \$17,868,000 \$23,326,000 \$17,868,000

FSP Share:

\$2,485,900

\$ 2,472,600

FSP %:

10.6%

10.6%

Number of Users:

1,086

Basic Architecture:

Mainframe:

IBM ES9000/480

Workstations:

IBM 3270

Telecommunications

Network:

55 - dedicated circuits tied to a 3745 Front End

Processor (FEP)

System Profile:

Programs:

Food Stamp, Aid to Families with Dependent

Children, Medicaid, General Assistance, Refugee Resettlement Assistance, Emergency Assistance,

Repatriate Assistance, Burial Assistance

#### 1.0 STATE OPERATING ENVIRONMENT

The Food Stamp Program (FSP) in the District of Columbia is administered by the Income Maintenance Administration (IMA). The IMA is responsible to the Commissioner of Social Services who reports to the Director of the Department of Human Services (DHS).

Washington D.C. is a major urban center which, though limited in size, contains a population of 609,909 people.

The Commission on Social Services consists of Family Services, Income Maintenance, Mental Retardation/Developmental Disabilities, Rehabilitation Services, and Youth Services.

IMA operates 11 direct service centers through its Bureau of Program Operations. IMA contains four divisions: Bureau of Program Operations, Bureau of Management Systems, Bureau of Training and Employment, and the Automated Client Eligibility Determination System (ACEDS) Project.

The District's unemployment rate has been rising since 1988. In 1983, the unemployment rate was at an all-time high of 11.7 percent. Unemployment decreased each year between 1983 and 1988, reached a 1990 rate of 5.0 percent, and rose to 7.7 percent in 1991.

#### 2.0 FOOD STAMP PROGRAM OPERATIONS

FSP in Washington, D.C. relies upon the support of several units outside of IMA:

- The Office of Inspection and Compliance (responsible for the investigation of all employee fraud cases)
- The Office of Information Systems (OIS) (supports the information systems serving the FSP)
- The Office of the Controller (processes payments and collections for reconciliation)

ACEDS supports FSP within the District. This recently implemented system is an integrated eligibility determination and benefit calculation system that has been several years in development.

The ACEDS project management organization structure reports directly to the Director of DHS and consists of the ACEDS Review Committee, DHS ACEDS Action Team, OIS, IMA, and Project Coordinator. The Project Coordinator confers with both the OIS and IMA project managers. The Project Coordinator position was disbanded in December 1991.

# 2.1 Food Stamp Program Participation

As shown in Table 2.1, FSP household cases have increased by 9.5 percent from 1988 to 1992 while Aid to Families with Dependent Children (AFDC) cases have increased by 34.3 percent during the same period.

Table 2.1 Average Monthly Public Assistance Participation<sup>1</sup>

PROGRAM	1992	1991	1990	1989	1988
AFDC Cases Recipients	22,788 60,741	20,950 55,488	18,672 49,304	18,010 47,571	18,445 49,084
Foster Care	2,801	2,564	2,476	1,976	1,880
GA Cases Individuals	2,844 2,975	4,770 4,930	4,496 4,683	4,372 4,503	4,454 4,608
FSP Households Individuals	32,006 71,757	30,909 73,254	27,915 66,158	26,363 59,844	25,977 58,968
Child Support Enforcement	213,717	179,311	147,722	127,131	119,407

### 2.2 FSP Benefits Issued Versus FSP Administrative Costs

The ratio of benefits issued to FSP administrative costs has improved from 6.4:1 in 1988 to 9.0:1 in 1992. The District's average monthly benefit issuance per household over the last five years, as provided in Table 2.2, has increased.<sup>2</sup>

Table 2.2 FSP Benefits Issued

	1992	1991	1990	1989	1988
Average Monthly Benefit Per Household	\$155.37	\$141.59	\$131.17	\$116.75	\$114.00

<sup>1</sup> All data supplied by D.C. staff.

<sup>&</sup>lt;sup>2</sup> The number of households and benefit amounts use data reported in the FNS State Activity Reports each year.

budget limitations were cited as the primary reason for decreased caseworker staffing levels.

The District government determines staffing levels. Caseworkers are not generic within the District. FSP caseworker levels are thus predicated upon FSP caseload volume. The implementation of ACEDS will lead to the introduction of generic staffing and a slow transition to this model has been taking place over the past six months.

The District is currently in the midst of legal issues regarding its ability to process applications in a timely manner. District staff, for this reason, were unwilling to divulge specific information regarding staffing levels, pending cases, etc.

## 2.4.2 Responsiveness to Regulatory Change

Of the 14 regulatory changes shown in Exhibit A-2.1, Appendix A, two were not implemented within the mandatory timeframes (274.2(b)(2) and 274.2(b)(3)). Three additional changes were not relevant to the District's operations (273.9(c)(1)(ii)(F), 273.9(c)(5)(i)(F), and 273.10(a)(1)(ii)).

District staff indicated that items not implemented on schedule, combined issuances, were not implemented in a timely manner because the automated system in existence at that time did not have the capability to handle this feature and ACEDS was so near to implementation that the staff decided to wait until ACEDS became operational to effect the changes. The changes were implemented in May 1992. No Food and Nutrition Service (FNS) waivers were requested or issued.

District staff's definition of "policy changes" appears to exclude instructions to line staff regarding regulatory change implementation. These may be seen as "procedural" rather than policy changes.

## 2.4.3 Combined Official Payment Error Rate

The District's official combined error rate, as indicated in Table 2.4, has fluctuated between 1988 and 1992.

Table 2.4 Official Combined Error Rate

	1992	1991	1990	1989	1988
Combined Error Rate	10.56	7.06	9.16	9.85	14.57

#### 2.4.4 Claims Collection

The amount of claims established has decreased over the last five years, while the value of the claims collected has increased steadily. The percentage of claims collected increased dramatically in 1991 and 1992.

Table 2.5 Total Claims Established/Collected

	1992	1991	1990	1989	1988
Total Claims Established	\$363,210	\$378,944	\$604,514	\$592,419	\$490,843
Total Claims Collected	\$224,165	\$230,305	\$212,610	\$186,928	\$184,759
As a % of Total Claims Established	61.7%	60.8%	35.2%	31.6%	37.6%

#### 2.4.5 Certification/Reviews

ACEDS was Family Assistance Management Information System (FAMIS) certified by the Department of Health and Human Services on February 14, 1994.

#### 3.0 OVERVIEW OF THE SYSTEM

This section describes the functionality, level of integration, and complexity of ACEDS.

#### 3.1 System Functionality

Registration. When an applicant for public assistance (PA) enters one of the direct service centers operated by the District, he or she is greeted by a receptionist who obtains basic identifying information and enters it into a "contact log" maintained by ACEDS. This contact log does not update the client database, but does track all clients that come into the office and to which worker the client is assigned. The receptionist also asks the applicant for which program he or she is applying. The District maintains 17 distinct programs.

Depending on the practice of each individual office, the applicant is either then given an application form for the specific program area being applied for, or routed directly to an intake worker. In either event, the applicant's next contact is with an intake worker who searches past and present participation files via an on-line terminal. If the applicant is applying for AFDC, as well as other programs

such as FSP and Medicaid, an AFDC intake worker performs this initial clearance and registration function. If AFDC is not involved, specialized workers may take over the intake function.

The intake worker's role within ACEDS includes initial clearance, basic registration, and eligibility. A search is conducted for each member of the household and the system saves the entire list of household members as part of the application process. ACEDS has the ability to copy historical records into the current application file. The intake worker (in some offices this function is performed by clerical employees) reviews potential matches to see whether they should be included in the case file, schedules the applicant for the eligibility interview, and enters basic registration information.

Client scheduling is a manual process, except for recertification. ACEDS automatically schedules recertification appointments with the caseworker.

• Eligibility Determination. Eligibility determination is performed by a caseworker either from information obtained from a paper application form completed by the applicant prior to the actual interview, or from information obtained from the applicant during the interview utilizing the interactive interviewing features of ACEDS. The interactive interviewing techniques supported by ACEDS are an option available to workers in the direct service offices; approximately 50 percent of the offices are currently using the techniques.

Data entry is performed either during the interview or after the interview, depending upon the methodology in use at that specific office.

Data entry screens are queued by ACEDS depending upon answers received to questions. Specific screens may be bypassed by the worker if inappropriate for the specific case and workers may go directly to any screen within the system by entering specialized codes at any time.

Application screens have immediate data edits and include on-line calculator screens for budget computations.

The system does not determine the people within a household that comprise a relevant assistance unit for the various programs and it will not determine eligibility for programs for which an applicant has not specifically applied.

The need for expedited service is determined by the intake worker and verified by the system at the time of eligibility determination. It is the District's policy that all applicants be seen the same day they first enter the direct service office.

• **Benefit Calculation.** Benefit calculations are performed automatically by ACEDS from income, asset, and expense data entered by the eligibility worker (EW). The EW must review and authorize benefit levels as well as eligibility determination;

supervisory authorization is required for all new cases, reapplications and benefit changes.

The system provides on-line outstanding verification reports and status fields that are used to confirm receipt of required documentation and provides an on-line verifications log of unresolved matches and verifications. Verification status fields must be completed before eligibility is determined or the case will be postponed.

• **Benefit Issuance.** The District issues authorization-to-participate (ATP) cards directly to households on a monthly basis, staggered by the recipient's name during the first 10 working days of the month. ATPs may be redeemed at various financial and check cashing institutions within the District and special issuances may be redeemed at a centralized government facility.

Non-delivered ATPs are returned to a central site for reconciliation. Replacement benefits may be requested by the Supervisor on-line and will be reissued the next working day. Recipients may also pick-up their issuances at the central site, however, the delivery method code of "H" (meaning "H Street") must be entered into the system to divert the issuance from the regular mailing process.

ACEDS links the document numbers of new and replacement issuances and provides an on-line display of the entire issuance history. Federally required issuance reports may be prepared from data provided by ACEDS.

ACEDS has a code table look-up feature for verification of the recipient's residence address. The feature insures the standardization of mailing addresses and the correct zip code information.

Issuance files are created daily for new and special issuances and monthly for ongoing benefits.

• Notices. ACEDS generates a full range of notices including both automatic (system generated) and worker-initiated notices. Each notice may contain up to five lines of free form text entered by the EW, except for those automatically generated. The EW's input into worker generated notices is available on-line. Workers generate notices by entering notice codes into ACEDS. Notices are mailed centrally from a District government unit.

The system supports numerous notice types, including those listed below:

- Key events related to household participation
- Key events related to household eligibility
- Warning that a monthly report was not received
- Reflection of denial because of failure to keep interview appointment
- Eligibility determination results
- Benefit reductions

- Benefit increases
- Application approval
- Denial based on eligibility determination
- Closure based on recertification information
- Claims System. The District's claims system is an integrated module of ACEDS. The EW enters data related to the cause of overpayments or underpayments and whether fraud is suspected. The corrected benefit allotment amount is calculated by the EW who enters data into the automated system and completes a paper form used to notify the claims and collection department. This department maintains an automated system for the tracking of claims on both active and closed cases. Calculations are performed by benefit month and are automatic for a specific month, however, the worker must redetermine the budget for each month affected by the claim.

ACEDS tracks the claim status, calculates the monthly recoupment amount (given the above limitations), subtracts the recoupment amount from the recipient's monthly benefit, generates a notice to the recipient regarding overpayment or underpayment, and automatically creates a collection record. Claims must be approved by a supervisor before recoupment begins.

The collection method is determined by the eligibility worker and monitored by edits within ACEDS.

• Computer Matching. Prior to initial certification (at the time of eligibility determination), ACEDS performs immediate on-line checks against these databases: State Data Exchange (SDX), Internal Revenue Service (IRS) income and assets, Benefit Earning Exchanges System (BEERS) for Social Security Administration (SSA) wages, District labor files for wage information and unemployment benefits, Beneficiary Data Exchange (BENDEX), and SSA validation of Social Security numbers (SSN). Some parts of the matching process are initiated automatically by ACEDS and others are worker initiated.

Checks are also performed against past and present participants as part of the initial registration and clearance processes.

After certification, regular matches are made against the databases listed above as well as District revenue agency data, Department of Motor Vehicles data, and Maryland and Virginia program participation data.

Duplicate participation checks are performed at certification and initial clearance, at recertification, and whenever a new household member is added to the case.

Discrepancies between reported data and that shown in other databases are reported to the caseworker if they exceed certain thresholds. They are displayed by the system in the form of on-line alert messages and may be viewed in detail

via an interface inquiry menu. Discrepancies may be removed from the alert screen when the worker is satisfied that the discrepancy has been resolved. The system requires a response to all discrepancy alerts within mandated timeframes.

Matching against Virginia's participation files is performed via a tape and paper exchange and is performed outside of ACEDS; matching against Maryland's files is performed within ACEDS.

• Alerts. ACEDS displays numerous alerts to caseworkers and supervisors. These include discrepancies reported through the Integrated Eligibility Verification System (IEVS), interviews scheduled, notices to be sent, redeterminations due, pending applications, and transferred cases.

Alerts are not prioritized by ACEDS except for displaying them by date of action due. Alerts must be deleted from the system manually; supervisory approval is not necessary for the worker to take this action.

• Monthly Reporting. The District conducts an extensive monthly reporting program. ACEDS produces the monthly reporting forms for mailing, generates warning notices to clients whose reports are late, and automatically closes cases if the monthly reporting form has not been received within the stipulated timeframe. The system does not determine those cases which are subject to monthly reporting requirements.

Returned forms are sent from a central office to a service center for data entry into the system regarding receipt and/or changed circumstances. Eligibility workers, or clerical workers may enter this data into the system. The status of the monthly reporting forms is displayed in a status field within ACEDS.

Incomplete monthly reporting forms are considered as not received and may result in case closure. Food stamp monthly reports are returned to the client for completion, per program requirements.

- **Reports.** ACEDS provides reports to caseworkers and supervisors showing outstanding work needing attention. It also provides a full range of management and analytical reports produced on a scheduled basis. There are no ad hoc report generation tools available to line management at the present time.
- **Program Management and Administration.** The District's systems provide a limited form of electronic mail for supervisory staff which is used mainly for general notices and inter-office correspondence.

The help screen feature of ACEDS, while not a full blown on-line policy manual, provides policy background and interpretation as well as valid code data to field staff. A separate system provides on-line problem reporting and tracking abilities

to IMA while OIS uses a separate system to track change requests and problem reports that reach their level.

District staff indicate that they have insufficient experience with ACEDS to rate the accuracy of system generated reports, however, reports have always been received in a timely manner and appear to be accurate.

## 3.2 Level of Integration/Complexity

ACEDS is a new, integrated system that supports FSP, AFDC, and Medicaid in a comprehensive manner. Additional PA programs are also supported; a total of 17 separate program areas are served by ACEDS.

The technical aspects of the system reflect the mainframe-based, dumb terminal concept upon which it is based. It is an immediate update system with superior response times and a more than adequate batch window for matching, issuance, and interface purposes.

Application integration is equal to other recently developed systems of this type. Certain optional approaches (on-line policy manuals, assistance unit determination, etc.) are not present, but this lack does not appear to degrade the ability of the system to support the FSP operations within the District and is a deliberate design approach as opposed to an oversight or lack of developmental ability.

The ongoing support of the system by the internal staff of DHS is a matter of some concern given the lack of prior experience, the creation of a new data shop, and current dependence upon outside contractors (IBM). There is, however, a fully developed plan in place for the integration of internal staff with the system support contractors.

#### 3.3 Workstation/Caseworker Ratio

The current terminal to caseworker ratio is 1:1.

#### 3.4 Current Automation Issues

Since ACEDS was recently implemented, no major technical issues were identified as being of a pressing nature. A change control process and an integrated tracking system for requested enhancements and problem reports has been implemented.

The reported 50 percent implementation level of the interactive interviewing features of ACEDS should increase as organizational operational problems are resolved and staff gain more experience with the system's abilities.

The integration of the District's internal staff into the operations of the new data center and the related hardware, system, and application software support demands created by the ACEDS implementation must be considered the major issue facing the District at the present time.

#### 4.0 SYSTEM DEVELOPMENT AND IMPLEMENTATION

This section of the report describes the operations of FSP within the District before, and after, the implementation of ACEDS and provides a description of the process and approach taken in the development and implementation of this system.

## 4.1 Overview of the Previous System

Prior to the development of ACEDS, the District operated several different systems to support AFDC, Medicaid, and FSP. A total of five different systems were used for the eligibility determination, issuance, and claims payment activities of these major PA programs, each requiring separate and redundant data entry and processing activities.

These systems were mainly batch oriented; dedicated data entry staff at the central office entered data from forms completed by clients and caseworkers. The system operated on a turnaround document concept. The systems were predominantly paper-based and involved numerous manual processes.

## 4.2 Justification for the New System

The February 1990 ACEDS Cost/Benefit Analysis contains the justification for the development of a new automated eligibility determination/benefit calculation system. Projected cost savings are summarized in Table 4.1:

Table 4.1 ACEDS Projected Cost Savings

AREA	FIRST YEAR	SECOND YEAR
Error Reduction	\$7.115 million	\$7.115 million
Elimination of Redundant Systems	\$3.69 million	\$4.42 million
Standardized Street Address Codes	\$0.067 million	\$0.067 million
Automation of Manual Functions	\$0.298 million	\$0.306 million
TOTAL POTENTIAL SAVINGS	\$11.17 million	\$11.91 million

During fiscal year (FY) 1987, the District showed an FSP error rate of about 8.8 percent which represented a loss of \$2.3 million; AFDC had a similar error rate and made \$7.1 million in erroneous payments. ACEDS implementation was expected to reduce the error rate by 25 percent in both AFDC and FSP. Increased monthly reporting abilities provided by the proposed system was advanced as a major error reduction mechanism, as was the

ability to completely implement IEVS. The Medicaid error rate was 2.1 percent in 1987, below the Federal tolerance rate of 3 percent, but still accounting for a loss of \$6.3 million.

IEVS implementation alone was projected to save a total of \$3.48 million.

Total operating costs were projected to be approximately \$4.9 million in FY 92, as opposed to the projected operating costs for ACEDS during that same period of \$4 million.

In addition to those areas where District staff were able to assign dollar amounts to the savings realized through the use of the proposed system, several other areas of increased efficiency and effectiveness were identified. These areas included the following:

- Reduction in number of forms
- Reduction in potential litigation
- Reduction of staff stress and absenteeism
- Reduction in the number of fair hearing procedures
- Increased collection from absent parents
- Increase collection of FSP and AFDC overpayments
- Better staff monitoring and evaluation tools
- Reduction in the number of repetitive manual tasks

Other intangible benefits identified by District staff include:

- Improved caseload and expenditure forecasting
- Increased caseworker time for determining eligibility and improved service delivery to clients
- Uniform application of policies and procedures
- Improved management, budget planning and control
- Improved caseload and staff distribution
- Reduction in the number and frequency of manual processes
- Reduction in duplicate data recording
- Reduction and/or elimination of manual interfaces

## 4.3 Development and Implementation Activities

In 1982, the District recognized the need for a new computer system to support the PA programs within the District. A decision to transfer Delaware's system, subsequent to an internal review of existing IV-A systems in 1984, formed the basis for the submission, in January 1989, of an Implementation Advanced Planning Document (IAPD) requesting \$17.8 million for the development and implementation of an integrated system.

In 1985 an Advanced Planning Document (APD) was submitted that included a Request for Proposal (RFP) that was questioned by FNS staff as to the percentage of minority set-aside that the District had, as required by existing District regulations, included in the

proposed RFP for system development. DHHS, however, did not see this issue as a barrier to its funding of the system and work continued on the preparation of the RFP and supporting Federal documentation. The basic issue for FNS, at that time, was the requirement that a 35 percent share of the project be set aside for minority firms. The minority requirement was worth ten points in the overall evaluation of proposals. This requirement was later changed to five points of the total evaluation.

In February 1986, DHHS approved the RFP. A contract with Systemhouse, Inc. to develop an integrated IV-A system based on Delaware's existing system was signed on April 1988. However, DHHS (and the District) expressed concern regarding the selection of the Delaware system and DHHS committed funding only for the first two months of the project, which would be devoted to another review of existing IV-A systems in order to validate or revise the original decision.

The District decided in August 1988 to transfer the South Carolina Client History Information Profile System (CHIPS) instead of the Delaware system originally chosen. A new cost proposal was submitted by Systemhouse, Inc. in November 1988 and in January 1989 an ACEDS APD Update (APDU) was submitted to both DHHS and FNS. Both agencies had extensive questions about and comments on the APDU and Federal approval was not finalized until September 1989.

ACEDS equipment procurement began in December 1989 with the submission of an RFP for the acquisition of computer hardware and support services to the District's approving authority. DHHS approved the RFP in April 1990, FNS in October 1990.

A second RFP for remote site terminal equipment was submitted for internal District approval in August 1990. FNS approved the RFP in November 1990.

In June 1991, the two RFPs were combined into a single request and resubmitted to FNS and DHHS for review. FNS and DHHS approved it in July 1991.

In the meantime, software development activities went forward with Systemhouse, Inc. installing equipment, leased by them, to meet the necessary implementation dates. This equipment will be maintained in place and picked up under the existing lease as a part of the new equipment contract. SystemHouse, Inc., recovered their expenses through ADPU increases in November 1991 (\$4.1 million) and February 1993 (\$720,000), in effect acted as a conduit for the necessary hardware and timesharing services delayed by internal District procurement procedures.

Software development efforts included the following major tasks: alternative analysis completed - August 1988, general system design completed - July 1990, detailed design completed - January 1991, system test plans completed - February 1992, system testing completed - April 1992, documentation completed - September 1992, and system implementation - August 1993.

The system was fully implemented in August 1993 at a total cost of approximately \$21 million. The implementation date represented a slippage of approximately six months from the February 1993 projected date.

## 4.4 Conversion Approach

Conversion was, for the most part, a manual process involving the completion of forms for all new and existing cases and the subsequent data entry of those forms by conversion line staff. A small percentage of data elements were derived from existing systems to assist in the conversion process by identifying the cases that would be converted. These data elements were basically those found in the client index and contained little or no case specific data.

Approximately 120,000 cases were converted, with FSP users reporting no problems with system performance, availability, or completeness during the conversion process. Staff member's overtime commitment during the conversion process was reported as exhausting; however, no major difficulties in maintaining the agency's normal workload was noted.

The initial training of workers and support staff prior to conversion was successful, with FSP specific portions directed at the non-generic FSP workers. Training took place over a two week period in a classroom setting. Some staff had difficulty in learning to use the automated system, particularly with keyboard entry and real-time updating.

Conversion was accomplished within the planned timeframe and manpower allocation.

# 4.5 Project Management

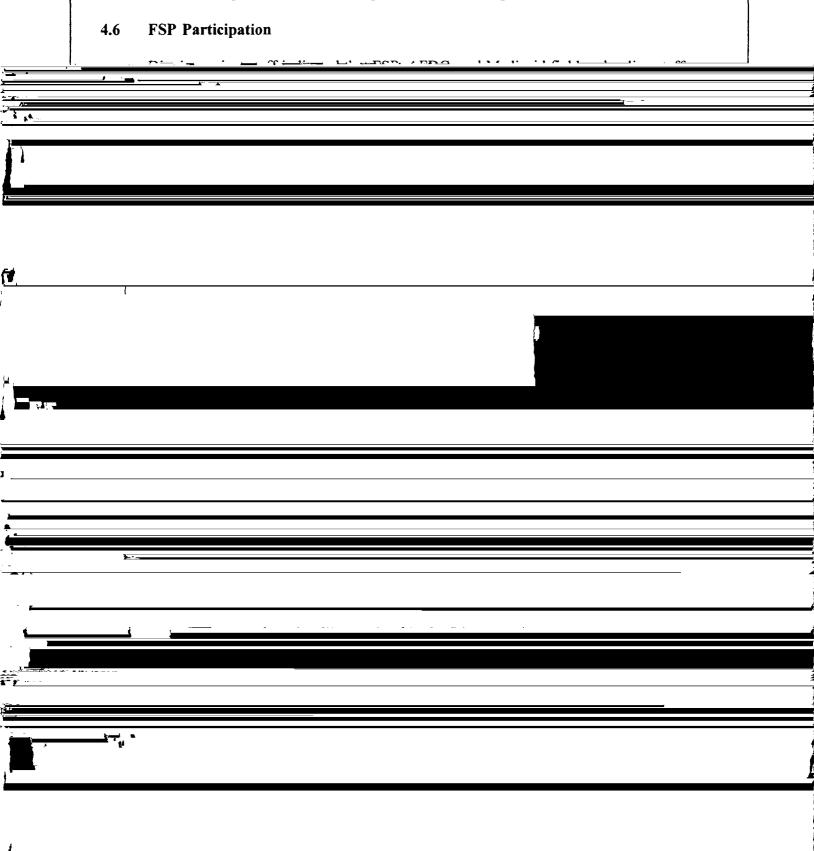
The ACEDS project management organization is centered around a Project Coordinator who holds the overall responsibility for the project. The Project Coordinator reports directly to the Director of DHS. OIS and IMA also participate in the project. The head of these units report to the Director of DHS and consult with the Project Coordinator.

The Director of DHS is also advised by the ACEDS review committee and the DHS ACEDS action team.

An OIS project manager coordinated and managed the technical aspects of the project, while an IMA project manager supervised both IMA project staff and the ACEDS contractor. Both project managers consulted with the Project Coordinator as well as with the head of their individual units. The Project Coordinator position was judged to be superfluous and was discontinued in December 1991.

There was one staffing change in the IMA Project Manager position during the course of the project and one change for key FSP personnel. There were two changes to the contractor's project manager position.

The contractor had extensive experience in the design, development, and implementation of integrated Title IV-A systems prior to the Washington, D.C. project. While key contractor management personnel remained stable throughout the life of the project, contractor supervisory staff did experience some change.



#### 5.0 **TRANSFERABILITY**

The District conducted two separate alternative system evaluations. During the evaluation, conducted with the assistance of Systemhouse, Inc. in 1988, a number of systems were reviewed as potential transfer candidates. These candidates were Arizona, North Dakota, New Mexico, Kansas, South Dakota, Wisconsin, Delaware, South Carolina, Alabama, Alaska, Colorado, Connecticut, Georgia, Hawaii, Illnois, Mississippi, Oklahoma, Utah, Vermont, and Wyoming.

The criteria for system selection were: similar hardware, and State and FSP organizational structure; similar or larger caseload size; degree of application integration; desirability of functions and capabilities offered; FAMIS certification; and unique identification numbers.

During the review of these systems, District staff saw demonstrations by other States and vendors, reviewed system documentation, received DHHS and FNS input, and had extensive conversations with other States regarding their satisfaction with existing systems.

ACEDS uses the CHIPS as a base and offers some innovative design approaches and implementation procedures. The relatively small population served limits the suitability of transferring ACEDS to an organization that serves a larger population, however, it appears suitable for transfer to smaller States with an advanced telecommunication network in place. Response times within the District are well within design ranges and the system is relatively stable given its recent implementation.

A mainframe based, dumb terminal design, ACEDS is similar to many PA integrated systems currently in use. Its development demonstrates a tried and tested technology that was further refined to add functionality that fit the operational needs of the District. Its degree of maintainability, long term stability, and flexibility is not known at this time.

#### SYSTEMS OPERATIONS 6.0

This section provides a description of the District's automated eligibility system. The description includes a profile of system hardware and a discussion of the system operating environment as well as future plans.

#### 6.1 **System Profile**

Mainframe: IBM ES9000/480

MVS/ESA, CICS, ADABAS, NATURAL Security,

COBOL II

Disk: IBM 3390

Tape: Cartridge -IBM 3490 Reel -IBM 3420

• Printers:

Impact -

IBM 6262

Laser -

Xerox 9790

Front Ends:

IBM 3745

Workstations:

IBM 3270

• Telecommunications:

SDLC/SNA network of 55 circuits

## 6.2 Description of Operating Environment

This section contains a description of the local operating environment, including maintenance, telecommunications, performance, response time, and downtime. There is also a discussion of current projects and plans for the future.

## 6.2.1 Operating Environment

The District's DHS provides support for the recently installed ACEDS from two sources: the ACEDS project team, in conjunction with the prime contractor, Systemhouse, and OIS which provides the operational hardware and software support for the system.

OIS has recently installed an IBM ES9000/480 to process ACEDS, as well as support other applications that are currently running on an IBM 4341. The ACEDS predecessor, Income Maintenance Management System (IMMS) was run under a facilities management contract by EDS. The 4341 workload will be migrated to the 480 as necessary.

The data center is operational 6 days a week, 24 hours a day, with Sunday reserved for maintenance and other equipment/software changes. The primary software systems include MVS/ESA, CICS, ADABAS, NATURAL Security, time sharing option (TSO), and COBOL II. Peripheral equipment consists of 120 gigabytes of IBM 3390 DASD, 8 IBM 3420 reel tape drives and 8 3490 cartridge units supporting a tape library of 6,000 volumes. A single 3745 FEP supports the 55 data circuits connecting District offices to the central data center. Printed output is created by two IBM 6262 impact printers and a single Xerox 4020 laser printer.

An uninterruptible power supply (UPS) is installed providing both battery and generator backup for the data center. The operation is controlled by the building owner; OIS does not conduct any of its own testing of the UPS system.

There is no disaster recovery plan in place to support the ACEDS application or the OIS data center at the present time. Work is underway to select a commercial disaster recovery site, but nothing concrete is in place at this time.

## 6.2.2 State Operations and Maintenance

The OIS operations and support staff consists of the following personnel: data center operations (includes staff from OIS and IBM as a partial facilities management contractor) - 15, systems programmers - 5, database administration - 4, network support - 7, scheduling - 8, and help desk - 1. The District is not competitive in its ability to retain competent staff and to hire additional staff when required. The ACEDS Project Manager expressed concern over the number of staff currently available to support the system and the need to use contractor personnel to support not only the application, but some of the technical areas as well. The District recently awarded IBM an \$18 million contract to provide both hardware and support personnel (technical and operations types). It was felt that both additional full-time staff and higher salaries would be required to meet internal support requirements.

The on-line shift for ACEDS runs from 8:00 a.m. to 8:00 p.m. when batch processing begins. The batch cycle usually runs until 4:00 a.m., but can run as late as 7:00 a.m. during peak processing periods (month end, mass changes, etc.). There is only one production region on the ES9000/480 today, but more work will be migrated from the 4341 in time.

Hardware and software maintenance are usually planned for Sundays when production is not normally scheduled. Full disk backups are performed every weekend and stored off site. Incremental backups are performed nightly by individual applications.

#### 6.2.3 Telecommunications

The District uses a dedicated network of 55 data circuits to support the ACEDS network. The network uses 38 9.6 KB circuits to connect to each of the local offices to the data center. The DHS headquarters building has two 56 KB circuits to consolidate 15 9.6 KB circuits that support nearly 400 terminals in the complex. The network operates under SNA/SDLC protocol and has no remote concentration or distributed capability. Other networks provide transmission interfaces for separate applications.

#### 6.2.4 System Performance

The mainframe processes only the ACEDS application and some TSO work. The current utilization averages 18 percent during first shift, with peak periods hitting 30 percent. Utilization will increase as work is migrated from the 4341.

Daily transaction volumes for ACEDS are listed as 250,000. The FSP portion could not be separated from the total.

## 6.2.5 System Response

No timings are maintained for terminal response time (time needed to get a response after the enter key is hit). Both DHS/ACEDS and OIS indicated that response times are

normally in the two to three second range and that there were few complaints from the field concerning consistently or regularly occurring periods of degraded response time.

## 6.2.6 System Downtime

The ES9000/480 has only been installed for a few months. However, the data center has been providing automation support for a number of applications on an IBM 4341 mainframe and has established a solid track record of performance. District personnel indicated that system time up regularly exceeds 99 percent of scheduled availability. The ACEDS project team had no issues relating to system or network stability.

#### 6.2.7 Current Activities and Future Plans

The District has plans to upgrade the 480 to an IBM ES9000/570 sometime in 1994 as workloads are migrated from the 4341 and transaction volumes increase.

#### 7.0 COST AND COST ALLOCATION

This section addresses ACEDS development costs and level of Federal funding, ADP operational costs, cost control systems and methods, cost allocation methodologies for development and operational costs.

## 7.1 ACEDS Development Costs and Federal Funding

ACEDS was fully implemented in August 1993. The initial budgeted cost of ACEDS as documented in the January 1989 APD was \$17,868,000. The actual development cost as of September 14, 1993 is over \$23 million but does not include significant equipment costs covered under an IBM contract. If the equipment costs under this contract are added to the current actual expenditures, total development cost would be \$31,765,266. See section 7.1.2.1. for detailed cost components of this contract. However, the IBM equipment costs were not included in the most recently available APDU so it is uncertain as to how these costs will be categorized and allocated to the Federal agencies.

The total actual development cost of ACEDS and the amounts allocated to the FSP are presented in Table 7.1. The ACEDS development cost history, in Table 7.2, provides further detail on changes made to the APD budget and the incremental amounts which were approved by FNS.

Table 7.1 Total ACEDS Development Cost and Federal Funding

	Per January 1989 APD	Per April 1994 APDU *
TOTAL COST	\$23,451,000	\$23,326,000
Total FSP Share	\$2,485,900	\$2,472,600
Average Cost Allocation %	10.6%	10.6%
Total FNS Share at 75% FFP	\$1,028,400	\$1,028,400
Total FNS Share at 63% FFP	\$140,000	\$127,200
Total FNS Share at 50% FFP	\$446,200	\$449,800
TOTAL FNS SHARE	\$1,614,600	\$1,605,300

\* Information provided by D.C. after on-site visit was complete. Incorporated for information purposes only.

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Table 7.2 ACEDS Development Cost History

DATE	EVENT	COST	
1/23/89	DHS submitted initial APD to Federal agencies.	Total projected cost was \$17,868,000.	
10/23/90	FNS approved initial APD.	Total allocated to the FSP was \$1,884,339. Total FNS share approved at 75% Federal financial participation (FFP) was \$1,005,757 and at 50% FFP was \$271,665. Therefore, total FNS share approved was \$1,277,422.	
3/5/91	DHS submitted first APDU to Federal agencies.	FNS agreed to reimburse DHS for \$146,000 in rent and renovation costs at 50% FFP or \$73,000. Revised approved FNS share totaled \$1,318,600.	
11/04/91	DHS submitted second APDU to Federal agencies which included delay in the start-date for acceptance testing and change requests for the contractor.	Information on total cost impact was unavailable.	
12/09/91	FNS contingently approved second APDU provided that questions regarding project delay and change requests were sufficiently addressed.	No approval amounts included.	
2/25/92	FNS fully approved second APDU after DHS had addressed all its questions.	No approval amounts included.	
6/12/92	DHS submitted a special funding request so that Systemhouse employees could assist DHS in ACEDS implementation.	Total additional funding requested was \$441,958.	
7/20/92	FNS approved the special funding request.	Total FSP share approved was \$46,848. Total FNS share approved at 63% FFP was \$29,514.	
2/18/93	DHS submitted the third APDU.	Information on total cost impact was unavailable.	
4/14/93	FNS approved third APDU.	Total FSP share was \$2,373,700; Total FNS shares at 75%, 63%, and 50% FFP rates were \$923,850, \$206,199, and \$407,300 respectively.	

# 7.1.1 ACEDS Components

ACEDS was transferred from South Carolina's CHIPS. An on-line integrated eligibility system, ACEDS supports AFDC, FSP, Medicaid, and other District programs. The system provides the major functions of an eligibility system including:

- Eligibility determination
- Administrative functions
- Intake processing
- Monthly and management reporting
- Verification procedures
- Quality control
- Issuance
- Benefit reconciliation
- District budgeting
- Security
- Claims/collections

## 7.1.2 Major Development Cost Components

The following sections discuss the individual cost components for the ACEDS project as documented in the September 1993 *Development and Implementation Resource Summary for the ACEDS Project* and other related documents.

#### **7.1.2.1** Hardware

The amounts originally categorized under "timeshare hardware" for \$6,997,000 had to be used for timesharing services provided by Systemhouse. As previously mentioned, DHS has awarded a contract to IBM for a total of \$18.2 million, \$8.2 million of which will be used to purchase central and remote site hardware. The following table summarizes the cost components of the five (5) year IBM contract:

**Table 7.3 IBM Contract Cost Components** 

COST CATEGORY	TOTAL COST	
Central Site Equipment	\$5,231,137	
Remote Site Equipment	3,083,129	
Central Site Maintenance	621,959	
Services (software engineering, training, facilities management, project management)	8,826,816	
Install Changes	442,749	
TOTAL	\$18,205,790	

#### 7.1.2.2 Contractor Costs

Systemhouse was selected in April 1988 as the prime contractor to transfer and modify the system that would become ACEDS. From June though July 1988, Systemhouse assisted DHS in the evaluation of the proposed transfer systems. The actual ACEDS development effort did not begin until March 1990. The original contract covered 32 months and totaled \$5,585,894. The length of the contract was later extended to allow for additional system design specifications and assistance during the acceptance and pilot testing phase. The purpose and cost of these amendments were as follows:

Table 7.4 Systemhouse Contract and Amendments

PURPOSE	COST	COMMENTS	
Original Contract	\$5,585,894		
Timesharing Services	\$5,902,000	For period from 9/91 through 10/93	
Remote Site Installations/Equipment Lease	2,839,000	Through 12/93	
Training	\$406,000		
Change Requests	642,000		
TOTAL CONTRACT VALUE	\$15,374,894		

### 7.1.2.3 Summary of ACEDS Development Cost Components

Table 7.5 summarizes all actual expenditures as of September 14, 1993. Note that the total Systemhouse contract value as noted in Table 7.4 is actually divided among several categories in Table 7.5.

Table 7.5 ACEDS Development Expenditures by Cost Component

COST COMPONENT	ACTUAL COST PER JANUARY 1989 APD	ACTUAL COST PER APRIL 1994 APDU *
Systemhouse Contract and Changes	\$4,885,000	\$4,738,000
DHS ACEDS Personnel	4,736,000	4,736,000
Timeshare Hardware	6,997,000	6,997,000
Remote Site Hardware	2,526,000	2,526,000
Central Site Hardware	67,000	134,000
Software	1,213,000	1,213,000
Supplies	390,000	390,000
Miscellaneous (Travel and Printing)	265,000	265,000
ACEDS Office Rent	240,000	240,000
ACEDS Office Renovation	1,092,000	1,092,000
Training	1,040,000	995,000
TOTAL	\$23,451,000	\$23,326,000

<sup>\*</sup> Information provided by D.C. after on-site visit. Incorporated for information purposes only.

## 7.2 ADP Operational Costs

Although ACEDS was implemented in August 1993, the method and methodology for accurately tracking and allocating ACEDS operational costs have not been fully addressed. OIS is in the process of completing this task. However, DHS has projected total ACEDS operational cost at \$8,378,000 for Federal fiscal year (FFY) 1994 (4/94 APDU projected total ACEDS operational costs at \$10,360,000).

Prior to the implementation of ACEDS, the Federal programs were supported by IMMS. Therefore, the operational costs provided in Table 7.6 consist primarily of the costs incurred to operate this system. The other ADP operational cost component was the allocated cost from OIS. Table 7.6 summarizes ADP operational cost and the amount allocated to the FSP.

**Table 7.6 ADP Operational Cost** 

FY	TOTAL IMMS OPERATIONAL COST <sup>4</sup>	FSP SHARE	FSP SHARE AT 50% FFP <sup>5</sup>
1990	\$3,272,476	\$1,226,331	\$613,166
1991	3,462,259	2,367,646	1,183,823
1992	4,085,932	1,789,880	894,940
1993	4,101,645	1,785,872	892,936

### 7.2.1 Cost Per Case

Based on 1992 FSP operating costs of \$894,940, monthly operating costs averaged \$74,578 in 1992. The average number of FSP cases monthly was 32,006 households. The cost per case -- the monthly operational costs divided by the average number of monthly cases -- was \$2.33.

#### 7.2.2 ADP Operational Cost Control Measures and Practices

All DHS expenditures are entered into the District's on-line accounting system, the Financial Management System (FMS). FMS transactions are coded using the following account code structure:

- **Control Center** the highest level in the account code structure designed for budgeting, financial planning, and reporting. This code is used by top managers to analyze and monitor expenditures.
- Responsibility Code (RC) the primary level of financial control used by middle managers to control and monitor data. It is the level used to calculate FFP.
- Management Reporting Unit (MRU) used when an office or bureau is assigned to more than one cost pool (optional).
- Object Code (OC) used to identify the type of expenditure.
- Agency Reporting Category (ARC) used to identify the agency and FFY for which the expenditure was incurred (e.g. KN94 is equal to FSP FFY 1994).

<sup>&</sup>lt;sup>4</sup> The total OIS portion of operational cost was unavailable for these years.

<sup>&</sup>lt;sup>5</sup> Source: SF-269 reports from FFY 1990 - 1993.

After all transactions have been processed and adjusted for a three month period, an extract file is created to isolate DHS expenditure data and download it onto a tape. The DHS Summary of FMS Accrued Expenditures (SP343) report, generated from the downloaded data, is used to identify DHS expenditures by RC and MRU.

## 7.3 Cost Allocation Methodologies

This section describes the methodologies used by Financial Operations, within the DHS Office of the Controller, to allocate ADP development and operational costs.

#### 7.3.1 ACEDS Development Cost Allocation Methodology

In accordance with the Memorandum of Understanding referenced by R3 - DFO (37), dated 11/25/86, and agreed upon between the Family Support Administration (FSA), Health Care Financing Administration (HCFA), FNS, and DHS, a three step cost allocation methodology was created to allocate ACEDS development costs.

To determine the standard allocation percentages which would be used throughout the development effort, each system module was assigned to a direct, intermediate, special intermediate, or common cost pool which are defined as follows:

- Direct Cost Pool modules which meet the needs of a single program
- Intermediate Cost Pool modules which meet the needs of more than one program
- **Special Intermediate Cost Pool** modules which benefit more than one program and include name clearance, application registration, verification monitoring, inquiry, case transfer, case tracking, and third party liability functions
- Common Cost Pool modules which benefit all programs

Percentages were calculated for the intermediate and special intermediate cost pools based on a percentage of the programs' share of total eligibility factors or elements used by the program such as SSN, age, alien status/citizenship, etc. After these percentages were applied to the intermediate and special intermediate cost pools, person days were totaled for the direct charge and all intermediate cost pools to determine percentages for common cost pools.

After these percentages were applied to the common cost pools, person days for all system modifications were totaled for each funding source to determine the following standard cost allocation percentages: AFDC - 53.1 percent, FSP - 10.6 percent, Medicaid - 19.0 percent, and District - 17.3 percent.

These percentages were used to allocate both budgeted and actual ACED development costs.

## 7.3.2 ADP Operational Cost Allocation Methodology and Mechanics

Because ADP operational costs for FY 1990 through 1993 consisted of the costs incurred for the previous system, IMMS, and allocated costs from OIS, the methodologies used to allocate these costs are discussed below.

# 7.3.2.1 Allocating IMMS Operational Cost

To calculate the percentage which was applied against the total quarterly IMMS cost, statistics were collected for the following categories:

- Number of input documents/transactions
- Storage in the master file
- Number of checks (AFDC and PA) and FSP records passed to OIS
- Number of client notices and reports produced (lines of print)

The following steps were then executed to determine the quarterly cost allocation percentage:

- 1) The percentage for each program (AFDC, FSP, and PA) under each category was calculated. Total percentage in the category equaled 100 percent.
- 2) Percentages were totaled vertically (i.e. total number for each program for all categories).
- 3) Totals calculated in step 2 were added together.
- 4) The quarterly cost allocation percentage was determined by taking the program's total for all categories and dividing it by the total calculated in step 3.
- 5) The FSP's percentage was applied against the total IMMS operational cost for the quarter to determine its share.
- 6) The amount in step 5 was matched at 50 percent FFP.

## 7.3.2.2 Allocating OIS Operational Cost

OIS Operational cost can be divided into four major categories: personal services (PS), OIS contractors, IMA personnel who have devoted time to system activities, and non-personal services (NPS). OIS staff track and record their time via a time reporting system. The key code for each entry in this system is a standard job code which indicates the activity for which time was spent. The following job codes are used to charge directly to the FSP:

- ACFS FSP (development ACEDS)
- **FDSF** FSP (operational)

- FSPC FSP Specials (modifications for FSP)
- ACED04 Generic code for non-specific program tasks

Output from the time reporting system is used to calculate statistics which are applied against PS costs, contractor costs, and IMA personnel costs. After the statistics have been applied, three separate quarterly reports summarizing OIS personnel, OIS contractors, and IMA personnel costs are generated. These reports provide the allocated costs for the appropriate funding sources.

NPS costs are operational costs accumulated under one of the following cost pools: mainframe, disk, tape, tape library, printing, SYSRDR, microfilm, teleprocessing, and xeroxing.

An OIS administration officer is responsible for categorizing NPS costs in the correct cost pool as well as computing the usage statistics and applying them against the cost pool after all costs have been accumulated for the quarter. Once the usage statistics have been applied, a quarterly report is generated which provides, by system code, the amount of cost allocated to a particular program.

## 7.3.2.3 Preparing the SF-269

A budget analyst in Financial Operations is responsible for preparing the SF-269. The primary sources of information include:

- FMS report, SP343 for FSP administrative costs
- Time study report (from General Accounting)
- Other time study reports (e.g. from Office of Fair Hearings, Office of Investigations and Compliance)
- OIS quarterly reports (for OIS personnel, OIS contractors, IMA personnel, and non-personal services)

A detailed spreadsheet is used to input all FSP administrative costs and allocation percentages so that the SF-269 can be prepared. The following steps are executed to prepare the report:

- 1) Use SP343, described in section 7.2.2, to extract all administrative costs except ADP development and operational costs. Extract the total amounts for PS and NPS for all pertinent responsibility centers under the SF-269 category.
- 2) If the cost is not a direct cost enter the appropriate time study statistic and multiply by PS and NPS totals to compute the FSP's allocated share by responsibility center.

- 3) Multiply the indirect rate developed for the FFY, by the allocated share for PS to determine the indirect amount.
- 4) Add PS and NPS allocated shares (step 2) and indirect amount (step 3) to determine total share.
- 5) Multiply total in step 4 by FFP rate (usually 50%) to determine FNS share.

Steps 1 through 5 are repeated for all SF-269 categories except for ADP development and operational costs. These costs are extracted from the OIS reports which were discussed in section 7.3.2.2. Note that allocation statistics are not entered into the spreadsheet for ADP development and operational costs because the OIS reports present the cost after it has already been allocated.

APPENDIX A
DISTRICT OF COLUMBIA
EXHIBITS
THE ORKAND CORPORATION

Exhibit A-2.1 Response to Regulatory Changes

Code	Regulation	Provision	Federally Required Implementati on Date	Implemented on Time (Y/N)?	Computer Programming Changes Required (Y/N)?	Changes to State Policy/ Legislation Required (Y/N)?
1.1	1: Mickey Leland Memorial Domestic Hunger Relief Act	1: Excludes as income State or local GA payments to HHS provided as vendor payments 273 9(c)(1)(i)(F)	8/1/91	N/A	N/A	N/A

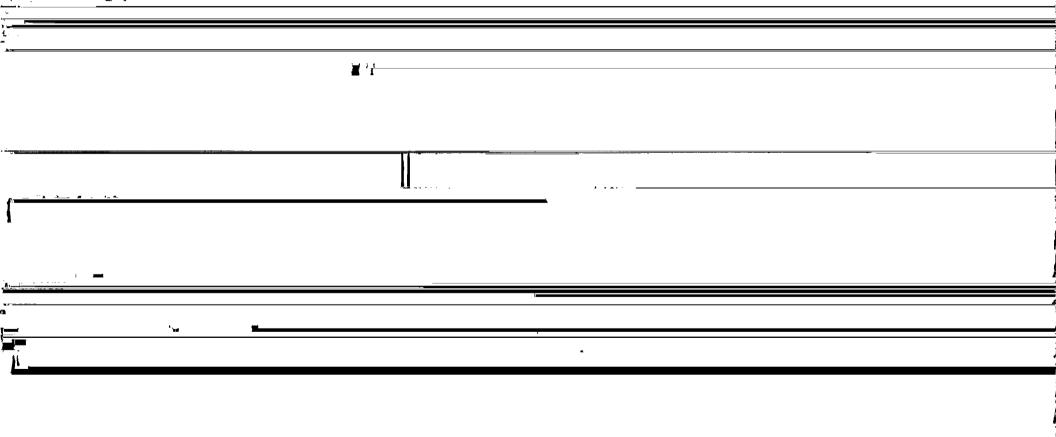


Exhibit A-2.1 Response to Regulatory Changes

Code	Regulation	Provision	Federally Required Implementati on Date	Implemented on Time (Y/N)?	Computer Programming Changes Required (Y/N)?	Changes to State Policy/ Legislation Required (Y/N)?
3.1	3: Disaster Assistance Act & Non-Discretionary Provisions of the Hunger Prevention Act	1: Exclusion of job stream migrant vendor payments. 273.9(c)(1)(ii)	9/1/88	Y	N	N
3.2	3: Disaster Assistance Act & Non-Discretionary Provisions of the Hunger Prevention Act	2: Exclusion of advance earned income tax credit payments. 273.9(c)(14)	1/1/89 *	Y	N	N
3.3	3: Disaster Assistance Act & Non-Discretionary Provisions of the Hunger Prevention Act	3: Increase dependent care deductions. 273.9(f)(4), etc.	10/1/88	Y	N	N
3.4	3: Disaster Assistance Act & Non-Discretionary Provisions of the Hunger Prevention Act	4: Eliminate migrant initial month proration. 273.10(a)(1)(ii)	9/1/88	Y	N	N
4.1	4: Issuance	1: Mail issuance must be staggered over at least ten days. 274.2(c)(1)	4/1/89	Y	N	N
4.2	4: Issuance	2: Limitation on the number of replacement issuances. 274.6(b)(2)	10/1/89	Y	Y	N
4.3	4: Issuance	3: Destruction of unusable coupons within 30 days. 274.7(f)	4/1/89	Y	N	N

<sup>\*</sup> These dates were changed after the District of Columbia completed this form and the site visit occurred; therefore, the responses to these particular regulatory changes may be inaccurate.

# Exhibit A-6.1 District of Columbia Hardware Inventory

Component	Make	Acquisition Method	Number/ Features		
		CPU			
ES9000/480	IBM	Lease/Purchase	256 megabytes main storage, 256 megabytes extended storage, 38 MIPS		
		DISK			
3390	IBM	Lease/Purchase	Controllers (2) Drives (32)		
		TAPE			
Reel Tape Drives	IBM	Lease/Purchase	3420 (8)		
Cartridge Drives	IBM	Lease/Purchase	3490 (8)		
		PRINTERS			
Impact	IBM	Lease/Purchase	6262 (2)		
Laser	Xerox	Lease/Purchase	4135 (1)		
	FRONT ENDS				
FEP	IBM	Lease/Purchase	3745 (1)		
	REM	OTE EQUIPMENT			
Workstations	IBM	Lease/Purchase	3270 (1,086)		

### APPENDIX B

# DISTRICT OF COLUMBIA

# ANALYSIS OF OPERATOR USER SATISFACTION SURVEYS

#### OVERVIEW

This appendix presents the results of the Operational Level User Satisfaction Survey. Frequency counts of responses to all applicable items on the survey are included, grouped by the topic covered by the item. The results for the items covering each topic are summarized as well.

The responses to the Operational Level User Satisfaction Survey are the perceptions of eligibility workers (EW) in the District. In other words, these responses do not necessarily represent a "true" description of the situation in the District. For example, the results presented regarding the response time of the system reflect the EWs' perceptions about that response time, not an objective measure of the actual speed of the response.

### Description of the Sample

The following table summarizes the potential population size and the final size of the sample who responded.

Number of EWs in D.C.	Number Selected to Receive Survey	Percentage Selected
N/A	N/A	N/A
	Number Responding to Survey	Response Rate
	63	N/A

Survey forms were provided to one person in the District with the expectation that the forms would be distributed randomly to EWs. It is not known exactly how many surveys were distributed, but the number of EWs who responded was large enough that their perceptions should be representative of EWs in the District. Because of a pending legal issue, District staff were unwilling to provide specific staffing numbers.

### Summary of Findings

Most of the respondents are satisfied with the computer system in the District. They generally find it responsive, accurate, and fairly easy to use. Two complaints are that response time is sometimes too slow and that the system is down too often.

Most respondents also think the computer system helps them do their jobs and makes them more efficient, although 56 percent feel that the system adds stress to their jobs and almost 30 percent feel that the system is more a problem than a help.

### SYSTEM CHARACTERISTICS

### Response Time

What is the quality of overall system response time?

	Number of Respondents	Percentage of Respondents(%)
Poor	3	4.8
Good	46	73.0
Excellent	14	22.2

What is the quality of system response time during peak periods?

	Number of Respondents	Percentage of Respondents(%)
Poor	14	22.6
Good	42	67.7
Excellent	6	9.7

How often is the system response time too slow?

	Number of Respondents	Percentage of Respondents(%)
Rarely	19	30.2
Sometimes	43	68.3
Often	1	1.6

The EWs who responded almost all agree that the system's response time is generally good or excellent although over half (68 percent) think the system response time is too slow sometimes or often.

### Availability

How often is the system available when you need to use it?

	Number of Respondents	Percentage of Respondents(%)
Rarely	2	3.2
Sometimes	16	25.8
Often	44	71.0

How often is the system down?

	Number of Respondents	Percentage of Respondents(%)
Rarely	9	14.5
Sometimes	34	54.8
Often	19	30.6

A large majority of the EWs feel the system is available when they need to use it. A substantial proportion, however, also think that the system is sometimes or often down.

### Accuracy

What is the quality of the information in the system?

	Number of Respondents	Percentage of Respondents(%)
Poor	6	9.8
Good	47	77.0
Excellent	8	13.1

How often is a case terminated in error?

	Number of Respondents	Percentage of Respondents(%)
Rarely	56	90.3
Sometimes	3	4.8
Often	3	4.8

How often is eligibility incorrectly determined?

	Number of Respondents	Percentage of Respondents(%)
Rarely	48	76.2
Sometimes	13	20.6
Often	2	3.2

How often is the systems data out-of-date?

	Number of Respondents	Percentage of Respondents(%)
Rarely	42	68.9
Sometimes	12	19.7
Often	7	11.5

Under the new (current) system, how difficult or easy is it to calculate benefit levels accurately?

	Number of Respondents	Percentage of Respondents(%)
More Difficult	2	3.8
About the same	7	13.5
Easier	43	82.7

The EWs generally think the system's data and computations are

quite accurate.

### Ease of Use

How often do you have difficulty obtaining necessary information from the system?

	Number of Respondents	Percentage of Respondents(%)
Rarely	41	65.1
Sometimes	18	28.6
Often	4	6.3

How often do you have difficulty learning to use the system?

	Number of Respondents	Percentage of Respondents(%)
Rarely	48	77.4
Sometimes	12	19.4
Often	2	3.2

How often do you have difficulty tracking receipt of monthly reporting forms?

	Number of Respondents	Percentage of Respondents(%)
Rarely	27	79.4
Sometimes	4	11.8
Often	3	8.8

How often do you have difficulty automatically terminating benefits for failure to file?

	Number of Respondents	Percentage of Respondents(%)
Rarely	44	83.0
Sometimes	6	11.3
Often	3	5.7

How often do you have difficulty generating adverse action notices?

	Number of Respondents	Percentage of Respondents(%)
Rarely	49	81.7
Sometimes	7	11.7
Often	4	6.7

How often do you have difficulty generating warning notices?

	Number of Respondents	Percentage of Respondents(%)
Rarely	43	76.8
Sometimes	6	10.7
Often	7	12.5

How often do you have difficulty determining monthly reporting status?

	Number of Respondents	Percentage of Respondents(%)
Rarely	36	90.0
Sometimes	2	5.0
Often	2	5.0

How often do you have difficulty restoring benefits?

	Number of Respondents	Percentage of Respondents(%)
Rarely	42	71.2
Sometimes	13	22.0
Often	4	6.8

How often do you have difficulty identifying recipients already known to the State?

	Number of Respondents	Percentage of Respondents(%)
Rarely	54	85.7
Sometimes	7	11.1
Often	2	3.2

How often do you have difficulty updating registration data?

	Number of Respondents	Percentage of Respondents(%)
Rarely	49	79.0
Sometimes	11	17.7
Often	2	3.2

How often do you have difficulty updating eligibility and benefit information from recertification data?

	Number of Respondents	Percentage of Respondents(%)
Rarely	46	80.7
Sometimes	8	14.0
Often	3	5.3

How often do you have difficulty identifying cases which are overdue for recertification?

	Number of Respondents	Percentage of Respondents(%)
Rarely	33	63.5
Sometimes	8	15.4
Often	11	21.2

How often do you have difficulty monitoring the status of all hearings?

	Number of Respondents	Percentage of Respondents(%)
Rarely	15	53.6
Sometimes	9	32.1
Often	4	14.2

How often do you have difficulty tracking outstanding verifications?

	Number of Respondents	Percentage of Respondents(%)
Rarely	44	75.8
Sometimes	10	17.2
Often	4	6.9

How often do you have difficulty automatically notifying households of case actions?

	Number of Respondents	Percentage of Respondents(%)
Rarely	48	80.0
Sometimes	7	11.7
Often	5	8.3

How often do you have difficulty notifying recipients that recertification is required?

	Number of Respondents	Percentage of Respondents(%)
Rarely	35	70.0
Sometimes	11	22.0
Often	4	8.0

How often do you have difficulty identifying cases making payments through recoupment?

	Number of Respondents	Percentage of Respondents(%)
Rarely	32	60.4
Sometimes	14	26.4
Often	7	13.2

How often do you have difficulty identifying error prone cases?

	Number of Respondents	Percentage of Respondents(%)
Rarely	30	55.5
Sometimes	16	29.6
Often	8	14.8

How often do you have difficulty identifying cases involving suspected fraud?

	Number of Respondents	Percentage of Respondents(%)
Rarely	26	48.1
Sometimes	17	31.5
Often	11	20.4

How often do you have difficulty assigning new case numbers?

	Number of Respondents	Percentage of Respondents(%)
Rarely	46	79.3
Sometimes	11	19.0
Often	1	1.7

Under the new (current) system, how difficult or easy is it to determine eligibility?

	Number of Respondents	Percentage of Respondents(%)
More Difficult	1	1.9
About the same	22	42.3
Easier	29	55.8

Under the new (current) system, how difficult or easy is it to track receipt of monthly reporting forms?

	Number of Respondents	Percentage of Respondents(%)
More Difficult	4	13.8
About the same	8	27.6
Easier	17	58.6

Under the new (current) system, how difficult or easy is it to automatically terminate benefits for failure to file?

	Number of Respondents	Percentage of Respondents(%)
More Difficult	1	2.2
About the same	9	20.0
Easier	35	77.8

Under the new (current) system, how difficult or easy is it to generate warning notices?

	Number of Respondents	Percentage of Respondents(%)
More Difficult	3	6.3
About the same	8	16.7
Easier	37	77.1

Under the new (current) system, how difficult or easy is it to determine monthly reporting status?

	Number of Respondents	Percentage of Respondents(%)
More Difficult	1	3.1
About the same	7	21.8
Easier	24	75.0

Under the new (current) system, how difficult or easy is it to restore benefits?

	Number of Respondents	Percentage of Respondents(%)
More Difficult	4	8.0
About the same	9	18.0
Easier	37	74.0

The EWs generally feel that the system is easy to use. Most report rarely having difficulty performing most of their usual functions. There is a significant percentage, over 50 percent, who feel that suspected fraud cases are difficult to identify and more than a third report difficulty obtaining information from the system.

#### FOOD STAMP PROGRAM LEVELS

### Worker Satisfaction Levels

How often is the system a great help to you in your job?

	Number of Respondents	Percentage of Respondents(%)
Rarely	1	1.6
Sometimes	14	22.6
Often	47	75.8

How often is the system an added stress in your job?

	Number of Respondents	Percentage of Respondents(%)
Rarely	28	44.4
Sometimes	26	41.3
Often	9	14.3

How often is the system more of a problem than a help?

	Number of Respondents	Percentage of Respondents(%)
Rarely	43	68.3
Sometimes	18	28.6
Often	2	3.2

Under the new (current) system, how satisfying do you find your work now?

	Number of Respondents	Percentage of Respondents(%)
Less	3	5.8
About the same	20	38.5
More	29	55.8

Under the new (current) system, how pleasant do you find your work now?

	Number of Respondents	Percentage of Respondents(%)
Less	5	9.8
About the same	23	45.1
More	23	45.1

Under the new (current) system, how stressful do you find your work now?

	Number of Respondents	Percentage of Respondents(%)
Less	17	33.3
About the same	18	35.3
More	16	31.4

Under the new (current) system, how much are you able to get done now?

	Number of Respondents	Percentage of Respondents(%)
Less	6	11.5
About the same	14	26.9
More	32	61.5

Under the new (current) system, how efficient are you in your work now?

	Number of Respondents	Percentage of Respondents(%)
Less	2	3.8
About the same	22	42.3
More	28	53.8

How do you rate the new (current) system in comparison to the previous system?

	Number of Respondents	Percentage of Respondents(%)
Worse	3	5.8
About the same	6	11.5
Better	43	82.7

The EWs are generally satisfied with the system although a majority (56 percent) find that it adds stress to their work. Overall more than 82 percent feel that the current system is superior to the previous system.

### Client Service

How often is expedited service difficult to achieve?

		Percentage of Respondents(%)
Rarely	39	73.2
Sometimes	14	26.4

How often do you have difficulty providing expedited services?

	Number of Respondents	Percentage of Respondents(%)
Rarely	42	77.8
Sometimes	10	18.5
Often	2	3.7

Under the new (current) system, how difficult or easy is it to interview a client in a timely manner?

	Number of Respondents	Percentage of Respondents(%)
More Difficult	6	11.5
About the same	29	55.8
Easier	17	32.7

Under the new (current) system, how would you rate the number of trips the client has to make to obtain benefits?

	Number of Respondents	Percentage of Respondents(%)
More	4	7.7
About the same	29	55.8
Fewer	19	36.5

Under the new (current) system, how would you rate the amount of time a client has to wait in the office?

	Number of Respondents	Percentage of Respondents(%)
More	5	9.6
About the same	31	59.6
Less	16	30.8

Under the new (current) system, how would you rate the amount of paperwork demanded of the client?

	Number of Respondents	Percentage of Respondents(%)
More	1	2.0
About the same	42	82.4
Less	8	15.7

The EWs find expedited service easier to provide but otherwise a majority rate the client service aspects of the current system as about the same as the previous system.

#### Fraud and Errors

Under the new (current) system, how difficult or easy is it to collect overpayments?

	Number of Respondents	Percentage of Respondents(%)
More Difficult	5	11.6
About the same	12	27.9
Easier	26	60.5

Under the new (current) system, how many errors are made?

	Number of Respondents	Percentage of Respondents(%)
More	6	11.5
About the same	9	17.3
Fewer	37	71.2

Under the new (current) system, how many instances of fraud get by?

	Number of Respondents	Percentage of Respondents(%)
More	2	4.3
About the same	24	51.1
Fewer	21	44.7

A significant percentage of respondents, 71 percent, feel that fewer errors are made under the new system but less than half perceive an improvement in fraud detection.

# APPENDIX C

# DISTRICT OF COLUMBIA

ANALYSIS OF MANAGERIAL USER SATISFACTION SURVEYS

#### OVERVIEW

This appendix presents the results of the Managerial Level User Satisfaction Survey. Frequency counts of responses to all items on the survey are included, grouped by the topic covered by the item. The results for the items covering each topic are summarized as well.

The responses to the Managerial Level User Satisfaction Survey are the perceptions of supervisors in the District of Columbia. In other words, these responses do not necessarily represent a "true" description of the situation in the District. For example, the results presented regarding the response time of the system reflect the managers' perceptions about that response time, not an objective measure of the actual speed of the response.

### Description of the Sample

The following table summarizes the potential population size and the final size of the sample who responded.

Number of Supervisors in D.C.	Number Selected to Receive Survey	Percentage Selected
N/A	N/A	N/A
	Number Responding to Survey	Response Rate
	29	N/A

Survey forms were provided to one person in the District with the expectation that the forms would be distributed randomly to eligibility worker supervisors. It is not known exactly how many surveys were distributed, but the number of supervisors who responded was large enough that their perceptions should be representative of supervisors in the District. Because of a pending legal issue, District staff were unwilling to provide specific staffing numbers.

### Summary of Findings

A majority of the supervisors think the system is very good and helps them in their jobs. Almost all respondents found the system easy to learn and use.

### SYSTEM CHARACTERISTICS

### Response Time

What is the quality of overall system response time?

	Number of Respondents	Percentage of Respondents
Poor	2	6.9
Good	20	69.0
Excellent	7	24.1

What is the quality of system response time during peak periods?

	Number of Respondents	Percentage of Respondents
Poor	5	17.9
Good	19	67.9
Excellent	4	14.3

How often is the system response time too slow?

	Number of Respondents	Percentage of Respondents
Rarely	12	41.4
Sometimes	14	48.3
Often	3	10.3

The supervisors who responded almost all agree that the system's response time is generally good or excellent although over half (52 percent) think the system response time is too slow sometimes or often.

# Availability

How often is the system available when you need to use it?

	Number of Respondents	Percentage of Respondents
Sometimes	3	10.7
Often	25	89.3

How often is the system down?

	Number of Respondents	Percentage of Respondents
Rarely	2	6.9
Sometimes	25	86.2
Often	2	6.9

The supervisors who responded almost all think the system is generally available, although a large majority (86 percent) also think it is sometimes down.

### Accuracy

What is the quality of the information in the system?

	Number of Respondents	Percentage of Respondents
Poor	1	3.4
Good	22	75.9
Excellent	6	20.7

Under the new (current) system, how difficult or easy is it to calculate benefit levels accurately?

	Number of Respondents	Percentage of Respondents
More Difficult	1	3.6
About the same	4	14.3
Easier	23	82.1

Almost all the supervisors who responded think the information in the system is either good or excellent and that benefit levels are easier to calculate.

#### Ease of Use

How often do you have difficulty obtaining necessary information from the system?

	Number of Respondents	Percentage of Respondents
Rarely	19	65.5
Sometimes	10	34.5

How often do you have difficulty learning to use the system?

	Number of Respondents	Percentage of Respondents
Rarely	22	75.9
Sometimes	7	24.1

How often do you have difficulty tracking receipt of monthly reporting forms?

	Number of Respondents	Percentage of Respondents
Rarely	11	61.1
Sometimes	3	16.7
Often	4	22.2

How often do you have difficulty automatically terminating benefits for failure to file?

	Number of Respondents	Percentage of Respondents
Rarely	25	89.3
Sometimes	2	7.1
Often	1	3.6

How often do you have difficulty generating adverse action notices?

	Number of Respondents	Percentage of Respondents
Rarely	21	75.0
Sometimes	7	25.0

How often do you have difficulty generating warning notices?

	Number of Respondents	Percentage of Respondents
Rarely	22	81.5
Sometimes	5	18.5

How often do you have difficulty determining monthly reporting status?

	Number of Respondents	Percentage of Respondents
Rarely	17	77.3
Sometimes	4	18.2
Often	1	4.5

How often do you have difficulty restoring benefits?

	Number of Respondents	Percentage of Respondents
Rarely	23	82.1
Sometimes	5	17.9

Under the new (current) system, how difficult or easy is it to determine eligibility?

	Number of Respondents	Percentage of Respondents
More Difficult	1	3.4
About the same	13	44.8
Easier	15	51.7

Under the new (current) system, how difficult or easy is it to track receipt of monthly reporting forms?

	Number of Respondents	Percentage of Respondents
More Difficult	4	21.1
About the same	3	15.8
Easier	12	63.2

Under the new (current) system, how difficult or easy is it to automatically terminate benefits for failure to file?

	Number of Respondents	Percentage of Respondents
About the same	5	17.9
Easier	23	82.1

Under the new (current) system, how difficult or easy is it to generate warning notices?

	Number of Respondents	Percentage of Respondents
More Difficult	2	7.1
About the same	4	14.3
Easier	22	78.6

Under the new (current) system, how difficult or easy is it to determine monthly reporting status?

		Number of Respondents	Percentage of Respondents	
	More Difficult	2	9.1	
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restore benefits?

	Number of Respondents	Percentage of Respondents
More Difficult	1	3.8

How often is the system an added stress in your job?

	Number of Respondents	Percentage of Respondents
Rarely	12	41.4
Sometimes	14	48.3
Often	3	10.3

Under the new (current) system, how satisfying do you find your work?

	Number of Respondents	Percentage of Respondents
Less	4	13.8
About the same	9	31.0
More	16	55.2

Under the new (current) system, how pleasant do you find your work?

	Number of Respondents	Percentage of Respondents
Less	3	10.3
About the same	12	41.4
More	14	48.3

Under the new (current) system, how stressful do you find your work?

	Number of Respondents	Percentage of Respondents
Less	9	31.0
About the same	12	41.4
More	8	27.6

Under the new (current) system, how much work are you able to get done?

	Number of Respondents	Percentage of Respondents
Less	5	17.2
About the same	4	13.8
More	20	69.0

Under the new (current) system, how efficient are you in your work?

	Number of Respondents	Percentage of Respondents
Less	4	13.8
About the same	10	34.5
More	15	51.7

How do you rate the new (current) system in comparison to the previous system?

	Number of Respondents	Percentage of Respondents
Worse	5	17.2
About the same	3	10.3
Better	21	72.4

Most of the supervisors who responded think that the current system is a great help to them in their work and but 59 percent also feel that it sometimes or often contributes added stress. A majority of the supervisors felt that the new system made them more satisfied and efficient and that the system was better overall.

### Management Needs

What is the quality of the reports produced by the system?

	Number of Respondents	Percentage of Respondents
Poor	9	32.1
Good	18	64.3
Excellent	1	3.6

What is the quality of the support provided by the technical staff supporting the automated system?

	Number of Respondents	Percentage of Respondents
Poor	2	6.9
Good	16	55.2
Excellent	11	37.9

How often do you have difficulty making mass changes to the system?

	Number of Respondents	Percentage of Respondents
Rarely	11	55.0
Sometimes	7	35.0
Often	2	10.0

How often do you have difficulty meeting Federal reporting requirements?

	Number of Respondents	Percentage of Respondents
Rarely	13	68.4
Sometimes	5	26.3
Often	1	5.3

Under the new (current) system, how efficient are the people you supervise?

	Number of Respondents	Percentage of Respondents
Less	6	21.4
About the same	17	60.7
More	5	17.9

Under the new (current) system, how difficult or easy is it to make mass changes?

	Number of Respondents	Percentage of Respondents
More Difficult	2	9.1
About the same	6	27.3
Easier	14	63.6

Under the new (current) system, how difficult or easy is it to evaluate local office efficiency?

	Number of Respondents	Percentage of Respondents
More Difficult	5	21.7
About the same	10	43.5
Easier	8	34.8

Most of the supervisors responding think the system helps them in their management tasks, with 68 percent thinking the reports produced by the system are good or excellent. However, there is a subset of supervisors who think the system makes their job more difficult: 32 percent think the reports produced by the system are poor quality and 21 percent think workers are less efficient and it is more difficult to evaluate local office efficiency. Almost everyone thinks the support provided by the technical staff is good or excellent.

#### Client Service

Under the new (current) system, how difficult or easy is it to interview a client in a timely manner?

	Number of Respondents	Percentage of Respondents
More Difficult	4	14.3
About the same	14	50.0
Easier	10	35.7

Under the new (current) system, how would you rate the services received by the client?

	Number of Respondents	Percentage of Respondents
Worse	4	14.3
About the same	6	21.4
Better	18	64.3

Under the new (current) system, how do you think the average client is being served?

	Number of Respondents	Percentage of Respondents
Worse	4	13.8
About the same	5	17.2
Better	20	69.0

Most of the supervisors think the client is being served better with the current system as compared to the old. However, four respondents (14 percent) apparently think the client is hurt by the current system.

# Fraud and Errors

Under the new (current) system, how difficult or easy is it to collect overpayments?

	Number of Respondents	Percentage of Respondents
More Difficult	1	4.3
About the same	9	39.1
Easier	13	56.5

Under the new (current) system, how many errors are made?

	Number of Respondents	Percentage of Respondents
More	1	3.8
About the same	10	38.5
Less	15	57.7

Under the new (current) system, how many false claims are caught?

	Number of Respondents	Percentage of Respondents
About the same	16	61.5
More	10	38.5

Under the new (current) system, how many instances of fraud get by?

	Number of Respondents	Percentage of Respondents
More	1	4.0
About the same	18	72.0
Fewer	6	24.0

Most of the supervisors think the current system does no better than the old system in fraud detection, although it does better in error detection and collecting overpayments.